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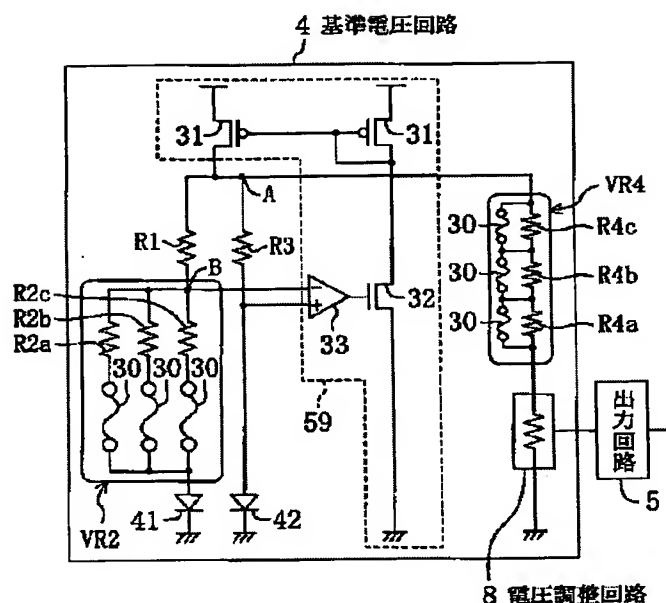
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TITLE : POWER SUPPLY CIRCUIT AND SEMICONDUCTOR INTEGRATED CIRCUIT HAVING THE POWER SUPPLY CIRCUIT



ABSTRACT : **PROBLEM TO BE SOLVED:** To provide a power supply circuit capable of generating power supply voltage matched with the characteristics of the minimum operation power supply voltage of an internal operation processing circuit including a semiconductor integrated circuit in its inside.

SOLUTION: A reference voltage circuit 4 in the power supply circuit is a circuit based on a band gap reference circuit and resistors R2a-R2c provided with fuses 30 are connected in parallel to one terminal of a differential amplifier circuit 33 in a feedback circuit 59. A 2nd variable resistor VR4 and a voltage control circuit 8 are connected in series between a terminal A and ground. The temperature characteristics of reference voltage (output voltage of the circuit 4) can be changed by controlling the resistance value of the resistor VR4. The resistor VR4 controls the absolute value of the reference voltage in accordance with the change of the resistance value of a 1st variable resistor VR2. The circuit 8 controls a change in the absolute value of the reference voltage due to the dispersion of processes.

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